



Probiotics and its effects on Irritable Bowel Syndrome

By: Chelsea Barber, MiChaela Gossett, and Brianna Lippard

Abstract

Introduction: Irritable Bowel Syndrome (IBS) is a functional disorder of inflammation and disruption of the gastrointestinal (GI) tract. This is the most common GI disorder affecting 10% of people in North America. Probiotics are active microorganisms that provide health benefits when consumed. They are beneficial because they improve or restore gut flora. Consumption of probiotics associate with shortening of colonic transit time in patients with IBS.

Purpose: The purpose of this review is to determine if there are beneficial effects of taking a probiotic among clients that are diagnosed with IBS.

Methods: The Evidence Analysis Manual was followed to examine articles one and two to evaluate the effects of probiotics on IBS. The studies of the articles included active and control groups and were done over a period of time that was feasible to produce an outcome.

Results: Article one and two both show a positive correlation in the improvement of symptoms in taking a probiotic while having IBS. Article one took into consideration more symptoms associated with IBS. However, both articles focused on the common symptoms of pain, constipation, frequency of bowel movement, and flatulence.

Conclusion: There was a positive correlation of improvement shown throughout the results of Table 1. They each focused on four common symptoms of IBS. This data showed the alleviation of symptoms while taking a probiotic.

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ABSTRACT

Introduction: Irritable Bowel Syndrome (IBS) is a functional disorder of inflammation and disruption of the gastrointestinal (GI) tract. This is the most common GI disorder affecting 10% of people in North America.¹ Probiotics are active microorganisms that provide health benefits when consumed. They are beneficial because they improve or restore gut flora. Consumption of probiotics associate with shortening of colonic transit time in patients with IBS.²

Purpose: The purpose of this review is to determine if there are beneficial effects of taking a probiotic among clients that are diagnosed with IBS.

Methods: The Evidence Analysis Manual was followed to examine articles one and two to evaluate the effects of probiotics on IBS. The studies of the articles included active and control groups and were done over a period of time that was feasible to produce an outcome.

Results: Article one and two both show a positive correlation in the improvement of symptoms in taking a probiotic while having IBS. Article one took into consideration more symptoms associated with IBS.³ However, both articles focused on the common symptoms of pain, constipation, frequency of bowel movement, and flatulence.^{3,4}

Conclusion: There was a positive correlation of improvement shown throughout the results of Table 1. They each focused on four common symptoms of IBS. This data showed the alleviation of symptoms while taking a probiotic.

INTRODUCTION

Consumption of probiotics associate with shortening of colonic transit time in patients with IBS.² Due to the recent research of Article one, it was discovered that more studies need to be done in order to fully evaluate the effects of probiotics on IBS. Article two provides additional evidence to support the research of probiotics and its effects on IBS.

Purpose: The purpose of this review is to determine if there are beneficial effects of taking a probiotic among clients that are diagnosed with IBS.

METHODS

Research was conducted using the EBSCO host search engine and search terms such as Irritable Bowel Syndrome, IBS symptoms, and probiotics were used.

Evidence Analysis Manual Steps⁵:

- 1- Formulate EA Question
- 2- Gather Evidence
- 3- Quality Criteria Checklists
- 4- Summarize Evidence
- 5- Conclusion Statement and Grade

Inclusion Criteria:

Full-Text
Peer-Reviewed
Published after 2010
Adults 18 years and older
Individuals diagnosed with IBS

Exclusion Criteria:

Not Full-Text
Not Peer-Reviewed
Published before 2010
Children younger than 18 years old
Individuals not diagnosed with IBS

RESULTS

Table 1: Comparison of evidence related to probiotics and IBS

ARTICLE ONE ³	Author, Year Study Design Class Rating	Purpose	Study Population	Intervention	Results
	Roberts LM, McCahon D, et al., 2013 Randomized Control Trial Class A Positive Rating	Investigate effects of the consumption of probiotics on IBS symptoms, specifically constipation, bloating, pain, and stool bulk and frequency	76 participants with IBS for longer than six months, aged 18-65 33 participants in active group 43 participants in control group	12-week study Symptom reports taken at weeks 4, 8, and 12 Active group received 125g yogurt containing the probiotic Bifidobacterium lactis (BID) Control group received 125g non-functional yogurt	Pain and constipation showed improvement Frequency of bowel movement and flatulence varied
ARTICLE TWO ⁴	Author, Year Study Design Class Rating	Purpose	Study Population	Intervention	Results
	Lee J, Rheem S, Yun B, et al., 2013 Placebo-controlled, double-blind, randomized trial Class A Positive Rating	Investigate the therapeutic effects on patients with IBS of a probiotic yogurt composed of five viable probiotic species with prebiotics mixture	96 participants with IBS, aged 18-80 46 participants in treatment group 50 participants in placebo group	9-week study Symptom reports taken at weeks 0, 6, and 8 All participants received 130mL of plain liquid yogurt twice daily within 30 minutes of breakfast and dinner with prebiotic mixture Treatment group received yogurt with five probiotics and the prebiotic mixture Placebo group received yogurt without prebiotics or probiotics	Pain, constipation, frequency of bowel movement, and flatulence all showed improvement

Grade II: Fair

The studies shown in Table 1 gave evidence to the purpose of our research. However, more evidence-based research is needed to be able to show significant improvements of taking a probiotic while having IBS.

CONCLUSION

There was a positive correlation of improvement shown throughout the results of Table 1. They each focused on four common symptoms of IBS. This data showed the alleviation of symptoms while taking a probiotic.



References

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6. All pictures from: thenounproject.com

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